

CAL
38-SANFRA,
215-

HAER No. CA-228

STERLING STREET SUBSTATION
(Key System Electrical Substation - San Francisco)
San Francisco-Oakland Bay Bridge System
Near corner of Harrison and Second Streets
San Francisco
San Francisco County
California

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Western Region
Department of the Interior
San Francisco, California

HISTORIC AMERICAN ENGINEERING RECORD

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Location: San Francisco- Oakland Bay Bridge System, City and County of San Francisco, California
Situating near the corner of Harrison and Second Streets, where the bus ramp diverges from the Bay Bridge west approach and heads toward the Transbay Terminal
UTM Zone 10: 553490, 4181890, USGS 7.5 Quad San Francisco North, 1959 (rev.1973)

Significance: This building was constructed as an electrical substation for the Key System trains that originally ran on the Bay Bridge, from Oakland to the Transbay Terminal in San Francisco. It was a vital component of the Bay Bridge. Although electric trains no longer run on the bridge, this building has retained its original use as an electrical substation and its association with the historic bridge. The concrete building (excluding the adjacent modern building and wheelchair ramp) also possesses a high degree of integrity, with alterations limited to a small canopy on the east side and installation of two ventilation louvers on the south wall. The building is therefore eligible for National Register listing as a contributing component of the Bay Bridge.

Description: This one story building is a rectangular concrete box, approximately 87 feet long (east to west) by 41 feet wide and 26 feet high. It has doors on three sides but no windows, with small ventilation louvers comprising the only other fenestration. The exterior walls have two parallel indentations near the top, a subtle decorative feature which relates the building visually to the concrete columns of the adjacent Bay Bridge west approach. There is a smaller building of similar design on Yerba Buena Island, which also served as an electrical substation for the bridge railway. A small metal canopy on the east side of the building was added after 1960. Adjacent to the west side is a small building of modern construction which has a flat roof, metal siding and false gables on all four sides. There is also a recently constructed wheelchair ramp in front of the modern building.

Historical Context:

This building was designed in 1937 by the Board of Consulting Architects for the San Francisco- Oakland Bay Bridge. The board consisted of Timothy L. Pflueger, Chair, Arthur Brown Jr., and John J. Donovan, three very prominent Bay Area Architects. The building was constructed as an integral component of the San Francisco- Oakland Bay Bridge. Electric train service on the Bay Bridge, for which this building was constructed, began in 1939. When the railroad tracks were removed after 1958, the building was converted to use as an electrical substation for lighting, fog horns, and other electrical needs on the bridge.

Sources:

Bibliography:

State of California Department of Parks and Recreation Primary Historic Resource Record and Building, Structure, and Object Record (DPR523A, B and J) prepared by Andrew Hope, Caltrans District 4 (Oakland) located at the Caltrans Office, 111 Grand Avenue, Oakland, California

Plans received by the Department of Public Works, San Francisco- Oakland Bay Bridge, Box 394, Contract R, PG&E Substations: Elevations of Proposed Substation prepared by the Board of Architects receipt dated Dec. 14, 1937, Site Plan and Working Drawings prepared by PG&E titled Sterling Substation, March 16, 1938.

STERLING STREET ELECTRICAL SUBSTATION
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Project Information:

This structure is being documented as part of the environmental impact study for the proposed seismic retrofit of the San Francisco- Oakland Bay Bridge because the building has been determined potentially eligible for the National Register of Historic Places and because of its close proximity to the existing bridge retrofit project. Architectural data form prepared by Geraldine Peterson, Architectural Historian, 9/1/1998 under Recordation of the San Francisco- Oakland Bay Bridge, California Department of Transportation (Caltrans), Contract Number 040069, Hansen-Murakami-Eshima, Consultants, Dan Peterson AIA, and Associates, Inc, HAER Consultant.

Supplemental Information:

Sterling Street Railway Substation General Arrangement, December 20, 1937, RY-11.
From the Fifth Annual Report to the Bridge Authority, 1938, page 54,

“Substations

Three substations, one at Sterling Street on Rincon Hill, San Francisco; the second on Yerba Buena Island, east of the tunnel; and the third at the west end of the East Bay yard are designated respectively as the Sterling, Island, and Mole Substations. The Sterling and Mole substations are being built on property belonging to the State, and the Island substation is within the right of way lines of the ‘joint permit’ from the United States Government to the State. They are being built and financed by the Pacific Gas and Electric Company and sold to the railroads on an installment basis.”